# 3M<sup>™</sup> Multiport Grommet Kit

## For Use With 3M<sup>™</sup> Fiber Optic Splice Closure 2178 Family

### **Instructions**

#### 1.0 Kit Contents

- a. Hose clamp
- b. Multiport grommet
- c. Blank plugs
- d. Silicone lubricant
- e. Cable strain relief bracket
- f. K-connector (small)
- g. Screw (small)
- h. K-connector (large)
- i. Screw (large)

Note: Visually inspect all components. If any component is missing or appears damaged, do not install. Call 3M customer service at 1-800-426-8688 for a replacement product.



3M™ Multiport Grommet 1.4" O.D.



3M™ Multiport Grommet 1.0" O.D. 2178-4PGR-0.28



3M™ Multiport Grommet 1.0" O.D.



#### 2.0 Drop Cable Preparation

- 2.1 Determine how many drop cables will be passing through the 3M<sup>™</sup> Multiport Grommet.
- 2.2 Remove sheath on drops exposing buffer tubes to a length required per company practice.

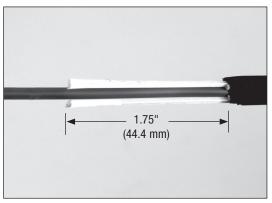
Note: An additional method to ease installation is to take sheath scuff supplied in closure kits, and slightly sand the leading edge of the drop cable and blank plugs.

- 2.3 Trim the strength members back to 1.75" (44.4 mm) in length.
- 2.4 Place a small amount of lubricant (provided in kit) on blank plugs and cable to allow for ease of installation into multiport grommet.

Note: Follow health, safety and environmental information on product label or Material Safety Data Sheet (MSDS) for Silicone Lubricant.

- 2.5 Grease approximately 2" of cable drop jacket.
- 2.6 Insert drops into multiport grommet first and then insert blank plugs last.
- 2.7 Insert drop 1"–2" into multiport grommet and then pull back out.
- 2.8 Insert drop the entire length of multiport grommet.
- 2.9 Repeat steps 2.4–2.8 for the blank plugs as well.

Note: Leave future ports orientated to top of closure for ease of future installations of drop.





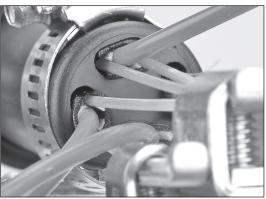
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#### 3.0 3M™ Multiport Grommet 4-Port (1.0") Installation

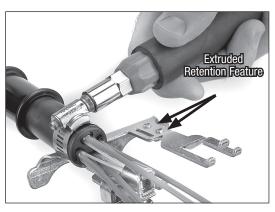
3.1 Orient the grommet as shown with one drop port positioned at top. Insert the two strength members from the top drop cable and the upper strength members from the drop cables on either side (four total) into the center large K-connector. Insert the remaining strength members into the small K-connectors on either side.



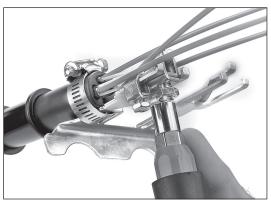


3.2 Secure cable strain relief bracket to the grommet with the hose clamp as shown. Tighten the hose clamp to 40 inch-lbs.  $\pm$  5 inch-lbs. (4.6 N•m  $\pm$  0.6 N•m).

Note: Ensure that the extruded retention feature of strain relief has sufficient contact with surface of grommet.



3.3 Tighten the three K-connector nuts to 40 inch-lbs.  $\pm$  5 inch-lbs. (4.6 N•m  $\pm$  0.6 N•m) each.



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#### 4.0 3M™ Multiport Grommet 6-Port (1.4") Installation

4.1 Break off the tab feature as shown on both cable strain relief brackets.

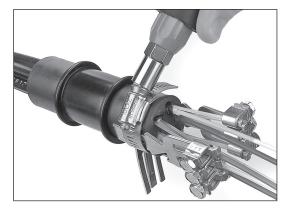


4.2 Place cable strain relief brackets on either side of the grommet, with three drops on either side as shown. Insert cable strength members into small K-connectors.

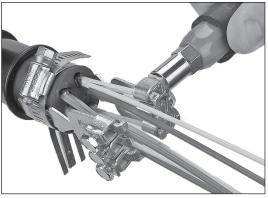


4.3 Secure cable strain relief brackets and the strain relief bracket from the closure to the grommet with the hose clamp as shown. Tighten the hose clamp to 40 inch-lbs.  $\pm$  5 inch-lbs. (4.6 N•m  $\pm$  0.6 N•m).

Note: Ensure that extruded retention feature of strain relief has sufficient contact with surface of grommet.



4.4 Tighten the six K-connector nuts to 40 inch-lbs.  $\pm$  5 inch-lbs. (4.6 N•m  $\pm$  0.6 N•m) each.



#### 5.0 Cable Port Seal Assembly

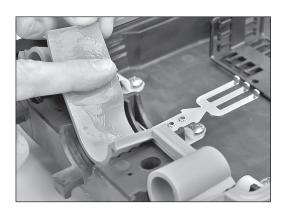
5.1 Place a small amount of lubricant (provided in kit) on blank plugs and cable to allow for ease of installation into 3M<sup>™</sup> Multiport Grommet.

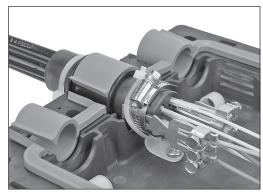
Note: Carefully follow health, safety and environmental instructions as given on Material Safety Data Sheet (MSDS) for the silicone lubricant.

- 5.2 Place cable strain relief and multiport grommet assembly into closure.
- 5.3 Place cable ties around multiport grommet assembly inside and out as shown.

Note: White cable ties are shown for clarity.

5.4 Follow closure instruction for all other preparation leading up to and including sealing closure.

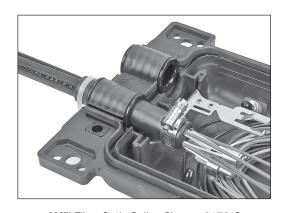




3M™ Fiber Optic Splice Closure 2178-XSB 3M™ Fiber Optic Splice Closure 2178-XLB



3M™ Fiber Optic Splice Closure 2178-XL



3M<sup>™</sup> Fiber Optic Splice Closure 2178-S 3M<sup>™</sup> Fiber Optic Splice Closure 2178-LS 3M<sup>™</sup> Fiber Optic Splice Closure 2178-LL

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